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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/996,946	11/30/2001	Taeko Hayase	0445-0313P	3991
2292	7590	01/23/2004	EXAMINER	
BIRCH STEWART KOLASCH & BIRCH PO BOX 747 FALLS CHURCH, VA 22040-0747			COLE, ELIZABETH M	
			ART UNIT	PAPER NUMBER
			1771	

DATE MAILED: 01/23/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/996,946

Applicant(s)

HAYASE ET AL.

Examiner

Elizabeth M Cole

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db

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 07 October 2003.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-15 is/are pending in the application.
- 4a) Of the above claim(s) 12 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-11, 13-15 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. §§ 119 and 120

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.
- a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) \_\_\_\_\_.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). \_\_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_.

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-11, 13-16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Canadian Patent Application 2,047,010 to Burkhardt in view of JP 2000-212866 to Iwata et al, (partial translation attached). Burkhardt discloses a cleaning sheet comprising an absorbent nonwoven sheet which has a plurality of fibers or tips on one surface. The tips comprise thermoplastic polymer fibers such as polyester fibers having a preferred length of 8 mm and a fineness of 5-30 dtex. See page 3, paragraph 3. Burkhardt differs from the claimed invention because Burkhardt does not disclose that the substrate sheet comprises a mixture of cellulosic and thermoplastic fibers and because Burkhardt does not disclose the number of tips on the surface. With regard to the number of tips on the surface, it would have been obvious to have optimized the number of cleaning tips in the Burkhardt reference in order to arrive at a cleaning sheet having the optimum cleaning ability.

With regard to the limitation that the nonwoven fabric has a "number of tips of said thermoplastic fibers forming the nonwoven fabric exposed on the surface", since Burkhardt teaches that the nonwoven sheet may comprise all plastic fibers, the fibers making up the tips would be the fibers that make up the nonwoven fabric.

With regard to the substrate sheet itself, Burkhardt teaches that a nonwoven sheet may be used, but is silent as to the particulars of the sheet. JP 20000212866 to

Iwata et al discloses a strong, bulky nonwoven fabric have excellent absorbency and wiping ability comprising a thermoplastic fiber having a length of 3-25 mm and a denier of 0.5 –50 denier which encompasses the claimed range and a cellulosic fibers. The fibers are bonded at intersections by heating. The cellulosic and thermoplastic fibers are present in the claimed proportions. See paragraphs 9-16 of the partial translation and the abstract. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have employed the wiping fabric of Iwata et al as the substrate in Burkhardt. One of ordinary skill in the art would have been motivated to employ the Iwata fabric as the substrate in Burkhardt because Iwata et al teaches that the nonwoven is particularly suitable for use a wiper and has good strength, bulk and absorbency.

#### ***Response to Amendment***

3. It is noted that the status identifier of claim 12 should be "withdrawn" rather than "original".

#### ***Response to Arguments***

4. Applicant's arguments filed 10/7/03 have been fully considered but they are not persuasive. Applicant argues that the fibers of Burkhardt are applied to the substrate. However, as set forth above, the fibers of both the nonwoven and the tips may be the same plastic fibers. Therefore, the tips would be the same fibers as those making up the nonwoven. With regard to the argument that Burkhardt does not teach the number

of tips to be a result effective variable, since Burkhardt teaches employing the tips as wipers, one of ordinary skill in the art would recognize that the number of tips would be related to the efficiency of cleaning in that one tip would be less effective than many tips, but that too many tips would have a deleterious effect on the flexibility of the fibers and the ability of the fibers to hold dirt. Therefore, through the process of routine experimentation, the optimal number of fibers would be selected.

5. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Elizabeth M. Cole whose telephone number is (571) 272-1475. The examiner may be reached between 6:30 AM and 6:00 PM Monday through Wednesday, and 6:30 AM and 2 PM on Thursday.

Mr. Terrel Morris, the examiner's supervisor, may be reached at (571) 272-1478.

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Inquiries of a general nature may be directed to the Group Receptionist whose telephone number is (571) 272-0994.

The fax number for all official faxes is (703) 872-9306.

A handwritten signature in black ink, appearing to read "Elizabeth M. Cole". The signature is fluid and cursive, with the first name being the most prominent.

Elizabeth M. Cole  
Primary Examiner  
Art Unit 1771

e.m.c